



## Northern Breeding Business (NB2) RDE&A Strategic Partnership

# Charter of Operations

Short version – 17 June 2021

### Background

The Northern Breeding Business RDE&A Partnership (NB2) is a joint initiative of the North Australia Beef Research Council Inc. (NABRC) and Meat and Livestock Australia Ltd (MLA). It will address key issues that impact the northern beef industry by promoting and facilitating:

- Increased and diverse investment in RDE&A for the benefit of the northern beef industry,
- Increased engagement in RDE&A by northern beef producers,
- Sustainable increases in productivity and profitability from northern rangeland systems; including but not limited to reduction in calf mortality, increased breeder productivity and reproductive efficiencies,
- Increased conversion of research and development output into industry/business outcomes.

There are three main drivers of the program:

1. A need to address the identified issue of calf wastage in northern breeding herds
2. The acknowledged relatively poor rate of uptake or adoption of R&D outcomes by the northern industry (Chilcott 2020).
3. Objective evidence that most northern beef enterprises are not economically sustainable in the long term (Holmes & McLean 2017).

### Key highlights of NB2

- Embedding producers in the conception, delivery, management and governance of NB2 will deliver ownership of RDE&A to northern beef businesses, and demonstrate a more effective pathway from research and development to business practice.
- The adoption of a more business focused approach by northern beef enterprises, based on the collection and analysis of objective data, Relatively modest and readily achievable increases in productivity of a beef enterprise can have a significant positive impact on profitability. The proposed target increases while relatively modest at an individual enterprise scale, are potentially transformational at a whole of industry scale.
- The issue of calf wastage in the northern beef industry, will be addressed through the development, promotion and implementation of breeding herd management systems that have been custom designed for beef enterprises in specific environments.
- The Value Proposition of the NB2 program is attractive, with a minimum 5:1 benefit: cost ratio.
- The scale and duration offers education, training, career development, mentoring and employment opportunities for people entering or already engaged in the northern beef industry.

## Specific objectives

By 2027, yield \$20M in net benefits per annum to the northern beef industry through increased production of 10M kg live weight of sale cattle.

This will be delivered through 250 northern beef businesses engaged with **NB2**, each with at least 800 AE of cattle, collecting and using objective data to inform business decisions and achieving, within the seven-year initial life of the program:

- 5% increase in weaning rate,
- 1% decrease in herd mortality rate,
- 10 kg increase in sale weight of cattle at the same age,

while operating at a level of production and profit that is sustainable in the long-term.

## Structure

The NB2 partnership embeds north Australian beef businesses in the core of its management, execution and delivery of outcomes.

There are two key elements to the NB2 structure:

1. An adoption focus through its Pathway to Practice pillar that actively engages northern beef businesses in the collection and use of objective data to inform business decisions.
2. A Management Committee led by an independent Chair with extensive experience in the northern beef industry, and two northern beef producer representatives.

The core business of NB2 is built around four pillars:

- Pathway to Practice
- Herd
- Feedbase
- Environment

Each pillar is led by an RDE&A professional, with a record of achievement and leadership in the area.

### ***Pathway to Practice***

The focus of the Pathway to Practice pillar is adoption and practice change, led by producers for producers, thereby maximising the opportunity for peer-to-peer communication as the primary method of creating, acquiring, testing and implementing innovations (see Figure 1).

Pathway to Practice is about:

- transforming R&D outcomes to business practice through trialling interventions supported by peers,
- adapting management systems to particular production enterprises,
- training and mentoring producers in good business principles, and
- assessing and demonstrating new technologies and management systems in the real-world of northern beef enterprises leading to business practice change.

Pathway to Practice supports north Australian beef businesses to:

- Collect and analyse standard beef business records to establish baselines for achieving production, performance and financial outcomes that are sustainable in the long term
- Promote and support awareness, development and adoption of business practice innovations
- Set direction for, and engage in, on-property R&D as determined through producer needs

The vehicle for achieving business practice change is through the establishment of RDE&A-ready collaborative producer groups who have agreed to participate in the on-farm research, development, education, training and adoption activities.

Collaborating producers engaged with the program are supported by one beef producer co-ordinator per five to ten businesses,. For the first three years following establishment of a producer group, agricultural department extension staff or consultants will provide additional support.

The Pathway to Practice pillar offers a framework for industry to become more astute in business decisions by collecting and analysing standardised beef enterprise data to establish baselines for their own businesses and help to build regional targets for productivity and performance. In order to establish baseline levels of performance at the start of the program and demonstrate the impacts on productivity and profitability from management interventions or technology adoption, collaborating business owners will be required to implement and maintain a standard set of basic business monitoring practices. Specific training or assistance will be provided by the NB2 program, as required.

The first stage of this adoption pillar involves a detailed business analysis to identify opportunities for interventions. Pathway to Practice will require the R&D focussed pillars of NB2 (Herd, Feedbase and Environment) to deliver relevant alternate practice options for consideration. These will be derived from previous R&D outcomes, and from current and future research. Pathway to Practice businesses will be well-positioned to access education, training and research opportunities, and will attract other providers such as government and Natural Resource Management (NRM) bodies who may provide additional funding. The advantage of creating Pathway to Practice is that more accurate assessment of potential effects on a business will be seen directly and more quickly.

Some selected Pathway to Practice businesses throughout northern Australia may host MLA supported integrated PDS activities, demonstrating the outcomes of NB2 facilitated R&D projects in real-life on-property environments. North Australian beef business engaged with NB2, having identified their needs through detailed business analyses, will “pull” appropriate research and development outcomes from the Herd, Feedbase and Environment pillars.

### ***Herd, Feedbase and Environment***

Targeted R&D will be conducted in the Herd, Feedbase and Environment pillars. The Herd pillar will focus on enhancing breeding herd performance through improved management systems and interventions. The Feedbase pillar will have a focus on optimising feed production, supply and utilisation for the breeding herd in order to achieve the desired performance, in a cost-effective manner. The Environment pillar will explore issues related to the managing the rangelands and the environment, and the long-term sustainability of the northern beef industry.

Further R&D projects that address future NABRC R&D priorities relating to the breeding herd and approved for funding by the NB2 Management Committee and MLA’s Red Meat Panel may be managed through NB2, with their outcomes evaluated from a whole of business performance perspective through the Pathway to Practice pillar. Through NB2, relevant outcomes from other R&D strategic partnerships such as the NLGC, LPP and the AWP may be assessed via the collaborative partnerships established under the Pathway to Practice pillar. Given the embedded business principles and benchmarking, these partnerships are the ideal vehicle for facilitating adoption in northern beef systems.

Any project targeting northern Australia and requiring support from MLA or NABRC, will be subject to endorsement by the NB2 management committee as well as that of the funding body, thus:

- A high level of industry ownership will be maintained
- A suitable framework is established for other entities to fund RDA, e.g. government agencies, corporations.

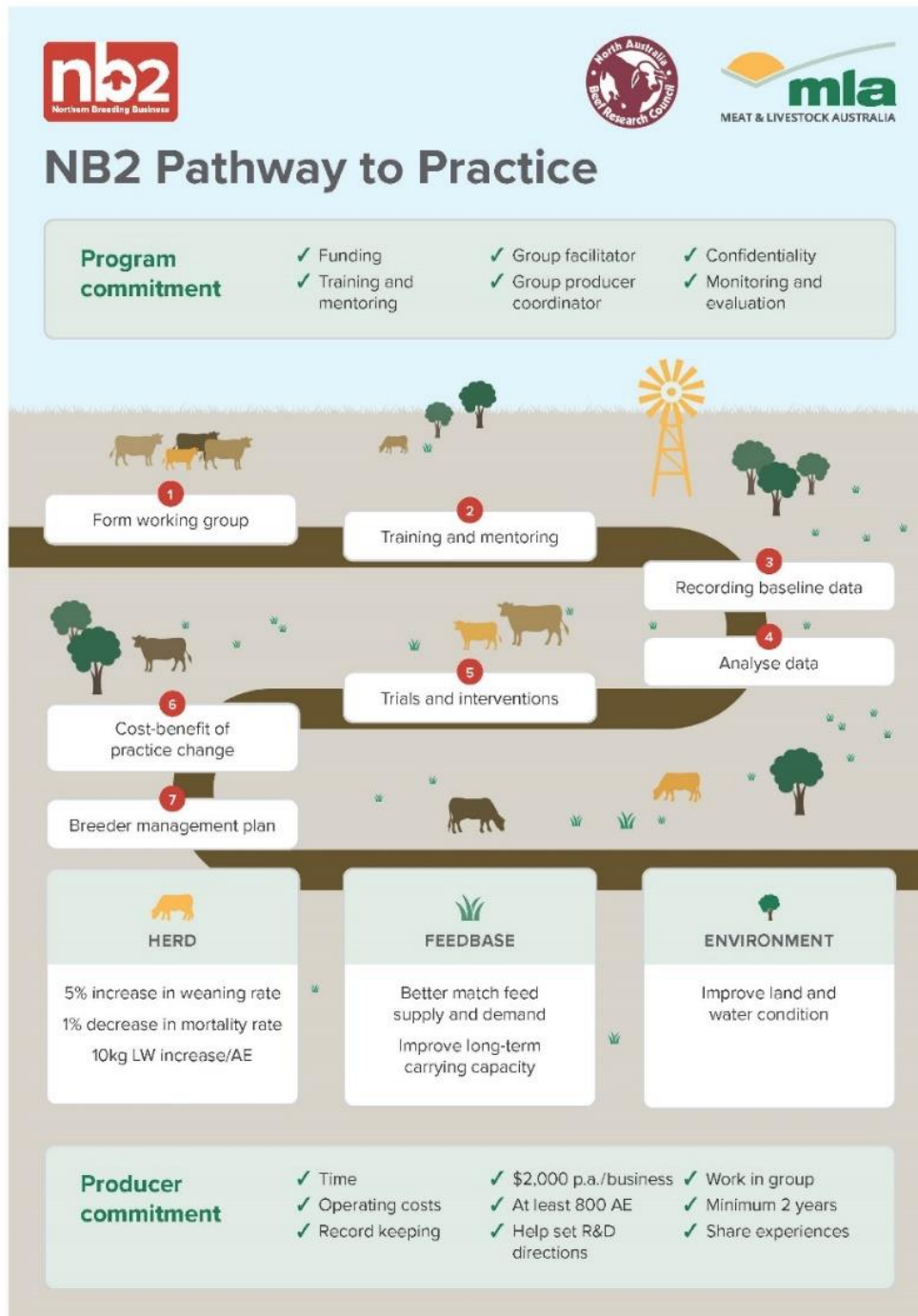


Figure 1. The Pathway to Practice change.

## **NB2 Producer Groups**

NB2 is being implemented in two stages, a pilot phase over the first two years in which the processes and procedures of NB2 are developed, implemented and evaluated, then expanding to the full NB2 program over the subsequent five years.

There are six producer groups, each with 5 to 10 business enterprises, engaged in the NB2 pilot:

- 2 x Qld-based groups;
- 1 x NT-based group;
- 1 x Kimberley/Pilbara group;
- 1 x Corporate group involving company properties located on the Barkly Tableland;
- 1 x Indigenous pastoral group with properties located across Qld.

Producers who want to be part of this will also make a contribution of \$2,000 per business per annum, paid on invoice to NABRC, who will leverage that money with additional federal funds (via MLA's donor company program - MDC) to almost \$4,000. The combined group contribution will be held in separate accounts by NABRC and drawn down on by the group to cover business analyst report costs and other expenses identified by the group such as training opportunities, speakers, group meeting costs of catering, travel costs to the annual NB2 event. The coordinator and facilitator will work with the group to manage these funds.

Once fully implemented, NB2 will engage with at least 250 beef business enterprises in groups of 5 to 10, across the 7-year initial life of the program.

## **Funding and budget**

Funding for the NB2 program, and projects undertaken within it, are funded through various combinations of:

- Levy funds from the MLA Beef Production budget (R&D) – \$1M per annum\*
- Levy funds from the MLA Producer Adoption budget (Adoption) – \$1M per annum\*
- Cash investment from research providers & other industry stakeholders – \$1M per annum\*
- Matched funds through the MLA Donor Company (MDC) – notional \$1M per annum\*  
\$4M per annum for 7 years = \$28M program of work\*.  
(\* indicative only)

## **Benefit:cost**

Modelling indicates that a notional \$4M per annum expenditure over 7 years (\$28M) should return \$19.3M per annum over the subsequent 7 years (\$135M) thus giving a Benefit: Cost = \$135M : \$28M, ie 5:1.

## The Value Proposition for Collaborating Northern Beef Producers

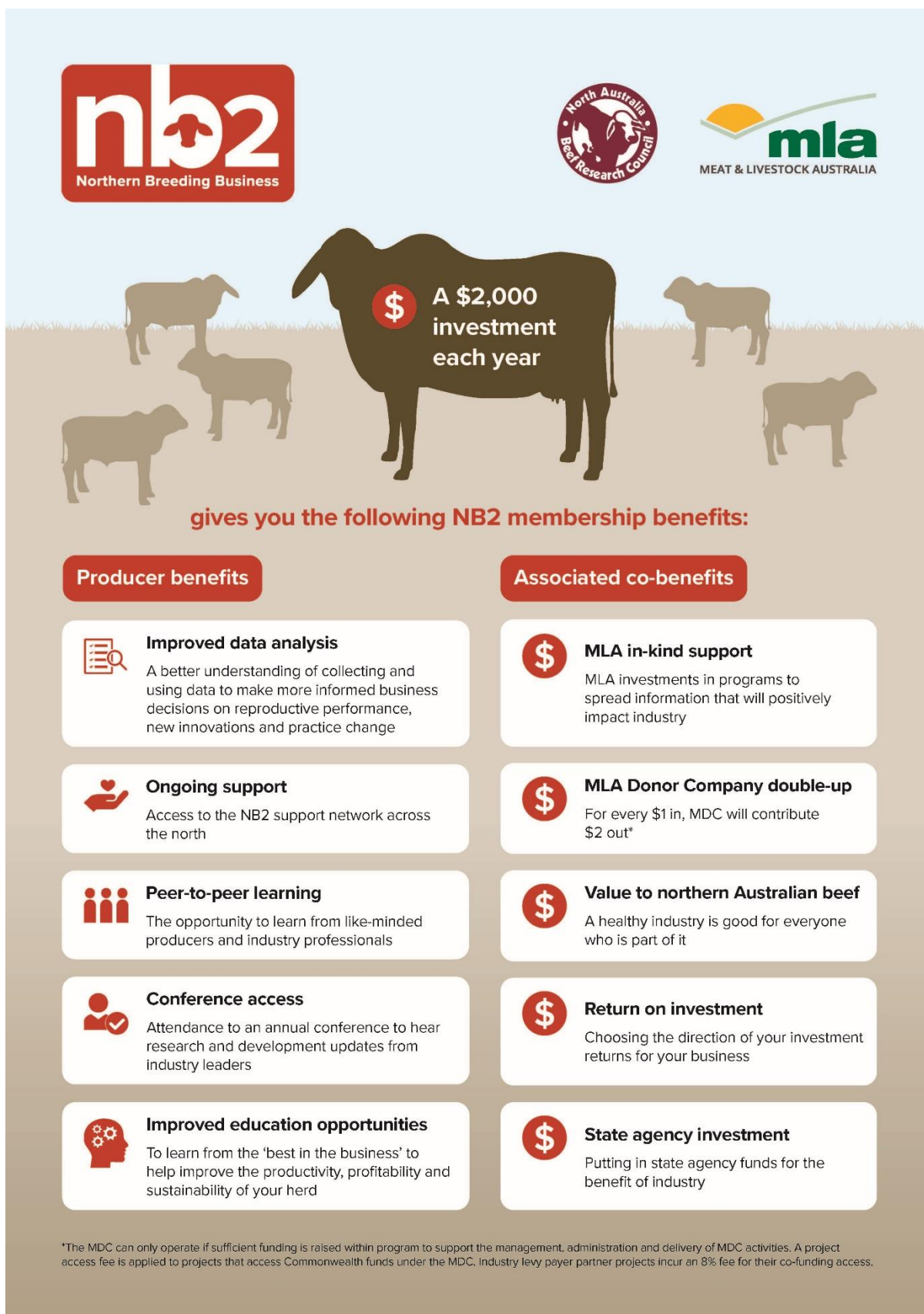


Figure 2. The NB2 value proposition.

## **Governance**

### ***NB2 Management Committee***

The NB2 Management Committee has been established by NABRC and MLA to oversee and monitor the development, implementation and delivery of the strategic partnership, in accordance with its Terms of Reference.

The Committee is responsible for the management NB2, including:

- determining the strategic direction of the partnership and ensuring that the strategic direction aligns with Red Meat 2030 and the MLA Strategic Plan2025;
- giving direction to the NB2 Co-ordinator in carrying out the responsibilities set out in their contract with MLA;
- reviewing and approving the NB2 Annual Report;
- reviewing the science quality and alignment of project applications with the NB2 Objectives and advising on new areas of research, development and adoption/extension activities;
- Reviewing, critiquing, recommending modifications to and delivering feedback on relevant project applications submitted to MLA; Recommending projects for inclusion in the Partnership; and providing advice and making recommendations to MLA on:
  - a) Governance;
  - b) Research, development, extension and adoption activities;
  - c) Budgets;
  - d) Risk analyses;
  - e) Monitoring, evaluation, review and Improvement (MERI) framework;
  - f) Communication and adoption plans; and
  - g) Other issues relating to the NB2 partnership as the Committee considers appropriate.

### ***NB2 Co-ordination Group***

The NB2 Co-ordination group is responsible for the ongoing planning, implementation and co-ordination of the NB2 program.

### ***Pillar Leaders***

The NB2 Management Committee has endorsed leaders for each of the four pillars, Pathway to Practice, Herd, Feed-base and Environment, in order to broaden the readily available base of expertise available in making decisions relating to technical and managerial aspects of the program, to aid in the integration and co-ordination of the activities of the stakeholder partners, RDE&A providers and collaborators, and to provide a leadership focus within the pillars.

### ***Group facilitators***

Key selection criteria for a group facilitator are:

- Extensive experience working in a professional extension/adoption role in the north Australian beef industry.
- A track record of achievement and leadership.

Key skills required:

- Group facilitation, communication and presentation.
- Conflict resolution and relationship management.
- Ability to use computer systems (including Microsoft Excel, Word and PowerPoint).

For the four pilot producer groups (2 in Qld, 1 in the NT and 1 in NW WA) the group facilitators will be State agency appointed, while for the corporate and indigenous pastoral pilot groups the group facilitators will be private consultants.

Group facilitators are responsible for:

- Assisting participating producers to collect standardised data throughout the year and fill in livestock schedules, feed budgets and financial budget at the end of each calendar year,
- Aiding producers to understand how to read/interpret reports generated from the analysed data,
- Facilitating group discussions on the baseline data to highlight key areas to focus on over the course of the 2-year pilot,
- Assisting producers with the evaluation of potential interventions or management practice changes for possible implementation,
- Facilitating discussion to identify training/skills building needs required and organise the appropriate training package(s).
- Providing feedback to MLA regarding the peer-to-peer learning process, the templates used for data collection, R&D priorities, and the Monitoring, Evaluation and Reporting (MER) framework via annual milestone reports,
- Engage 10% of producers to continue for 1 – 3 years beyond the pilot phase of the NB2 project to work with the MER expert to determine the impact of practice change.

#### ***Group producer co-ordinators***

Ideally, the group producer co-ordinators are selected from within the group by the members to provide a measure of leadership, mentoring and co-ordination of the group's activities.

Their roles include:

- Being the point of contact for the group,
- Leading communication within the group,
- Co-ordinating the group's activities,
- Reporting on data collection activities,
- Determining training needs of the group and liaising with the group facilitator with addressing those needs,
- Managing the groups MDC budget in association with the group facilitator and the NB2 Co-ordinator.

#### ***Stakeholders***

In addition to MLA and NABRC, potential stakeholder partners in the NB2 strategic partnership include, but are not limited to:

- NABRC members
- State and territory departments
  - Queensland Department of Agriculture and Fisheries (QDAF)
  - Northern Territory Department of Primary Industry & Resources (NTDPIR)
  - Department of Primary Industries & Resources, Western Australia (DPIRD)
- Government research agencies – CSIRO
- Universities
  - University of Queensland (UQ)
  - Central Queensland University (CQU)
  - James Cook University (JCU)
  - University of Western Australia (UWA)
  - Queensland University of Technology (QUT)



University of Sydney (USyd)

University of Melbourne

- Other non-NABRC member universities
- North Australia beef producers
- Pastoral companies
- Agricultural technology companies
- Agribusiness and AgPharm companies
- NRM agencies
- Consultants
- Financial institutions
- Private individuals
- Other stakeholders in the northern beef industry

## Data

The integrity of data and its analyses are critical for decision making to be useful. All participants in NB2; researchers, co-ordinators, collaborating producers and business advisors will be required to collect and store prescribed data and information in a standard format and manner, to be defined during the start-up phase of the strategic partnership. All data collection, storage, analysis and use will be compliant with the national Farm Data Code (2020).

(see <https://nff.org.au/programs/australian-farm-data-code/>)

Data, while remaining confidential and in the ownership of the relevant researcher or collaborating producer, will be stored centrally in a secure database. The physical location and management of the database will be determined during the start-up phase. Annual outputs will provide each participating business with up-to-date analysis of the productivity and profitability of their herd and business, including analyses of the efficacy of systems used or being evaluated, by comparing with like businesses. This information will form a basis for discussion groups to share experiences and findings. Where appropriate, and with approval of the owners, data that has been de-identified at the enterprise level, could be made available to NB2 collaborators.

Standardised data recording protocols and templates and KPI's have been developed for herd, feedbase and financials for north Australian breeding businesses. This will facilitate data capture, collation and analyses of objective data to inform strategic management decisions aimed at enhancing productivity, profitability and long-term sustainability.

## KPIs

By the end of Year 1 of the pilot (2021 calendar year), collaborating producers will be able to:

- Complete a livestock schedule,
- Complete a chart of accounts and basic cashflow budget,
- Complete a forage budget – linking standing dry matter at the end of the wet season to AE's,
- Complete an annual MER participant questionnaire regarding intention to make changes as a result of involvement in the program.

By the end of Year 2 of the pilot (2022 calendar year), collaborating producers will have:

- Completed an advanced livestock schedule,
- Captured adequate data for an annual financial report and understand how to use it,
- Completed training in matching stocking rate to carrying capacity – forage budgeting as well as land condition and long-term carrying capacity,

- Considered various practice changes/interventions for implementation, linked to increased saleable liveweight, weaning rate and decreased mortality rate,
- Completed a post-program KASA, including assessment of intention to change as well as summary of any changes already made.

## **Timetable**

An indicative timetable for the establishment and implementation, delivery and review of the proposed NB2 research, development and adoption strategic partnership is set out below.

January 2021 – June 2022 Start-up phase

June 2022 Stop/go

July 2022 – December 2023 Implementation phase

September 2023 – December 2023 Internal review

September 2025 – December 2025 External review

September 2027 – December 2027 Closure or extension

## **Communications Plan**

A communications plan has been developed for NB2, specifically the NB2 pilot in the first instance . This will be expanded for the full NB2 program once the pilot has been completed. This is a living document and will be progressively updated to reflect the development of NB2 as it delivers to a wider population of northern beef producers.

## **Monitoring, Evaluation and Review (MER) Framework**

A monitoring, evaluation and review (MER) plan has been developed for the pilot phase of NB2.